USAWC STRATEGY RESEARCH PROJECT

PREEMPTIVE ENERGY SECURITY: AN AGGRESSIVE APPROACH TO MEETING AMERICA'S REQUIREMENTS

by

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Global competition, declining resources, and domestic demand on resources have placed energy issues at the forefront of daily news. This situation highlights the incredible U.S. appetite for energy and tremendous reliance on foreign energy. The volatile nature of the world oil market not only places our economy at risk but jeopardizes America's security. The War on Terrorism has strained U.S. relations with many oil-producing states. Rapidly increasing crude oil demands by Asia add new competition for this resource. If foreign producers denied this nation oil, the effects could cripple the U.S. economy and would significantly impact security. The 2002 National Security Strategy acknowledges the importance of the nation's economy; however, there is no mention of the linkage of energy security and the economy. Until this nation commits to developing alternative forms of energy to gain independence from foreign oil, the United States remains vulnerable to volatile markets, global politics, and possible interventions of non-state players. Current policy limits U.S. action to diplomatic, economic, and information efforts to maintain access to oil. This Strategic Research Project analyzes the need to change the National Security Strategy to advocate the use of military force to guarantee access to foreign oil sources.

PREEMPTIVE ENERGY SECURITY: AN AGGRESSIVE APPRAOCH TO MEETING AMERICA'S REQUIREMENTS

This Strategy Research Project (SRP) addresses the need to restructure the National Security Strategy to assure the nation's access to foreign oil. Turbulent oil prices have recently set off economic tremors throughout the United States, highlighting our reliance on oil as a principle energy source. When the price of oil hit 70 dollars per barrel, gas prices shot above three dollars per gallon for the first time. As winter arrived in the northern part of this nation, so did increasing prices for natural gas and home heating oil. Every sector of the economy has felt the impact of skyrocketing oil costs, a burden placed on those who can least afford it. These increases, in turn, are passed on to consumers, who then must spend a larger portion of their income for energy. This recent series of cost increases reflect a changing oil market; this turbulence is much different from the experiences of the 1973 oil embargo and 1979 oil shortage. The latest increases are traceable to global competition and increasing domestic demand. Recent disruptions of shipping and the closure of refinery operations by hurricanes demonstrate the extreme volatility of petroleum prices and exposed a critical vulnerability to the nation's economy that our leadership must address. This nation's economy is a vital element of overall security. A dramatic reduction in oil imports would devastate our economy, diminish our global leadership, and create an untenable security environment. As General Anthony Zinni, former commander of U.S. Central Command (CENTCOM), testified to Congress in 1999, "America's vital interests in [the Gulf] are long-standing. With over 65 percent of the world's reserves located in the Gulf states, [the United States] must have access to the region's resources."1

From the moment Edwin L. Drake struck oil on 27 August 1859 near Titusville, Pennsylvania, the United States began developing an insatiable appetite for this source of energy.² Our demand for oil shows no signs of diminishing. The National Energy Policy clearly asserts "U.S. energy security depends on sufficient energy supplies to support the U.S. and global economic growth."³ The importance of oil to the U.S. economy makes it a strategically vital commodity. Accordingly, access to an uninterrupted flow of oil is of critical importance. This country must be prepared to deploy military forces to secure supplies if we encounter a situation in which we are denied access to oil. Of course, such resorts to military power are controversial; however, until the U.S. develops a comprehensive energy policy that leads to energy independence, such measures are necessary if we are to sustain a healthy economy and maintain our security. To sustain our national interests, our national security strategy must reflect this reality by clearly stating this nation intends to use force to guarantee access to oil.

Current National Security Strategy and Energy Policy

In 1946, Herbert Feis, historian, State Department advisor, and former chairman of the Committee on International Petroleum Policy, made one of the first attempts to link national policy to oil when he explained that this nation's security depended upon on foreign oil: "Oil, enough oil, within our certain grasp seemed ardently necessary to greatness and independence in the twentieth century." Feis' prophetic observation has proven to be valid as this nation's economy and security have become increasingly intertwined with our ever-increasing dependence on oil. U.S. dependence on foreign sources of oil is the most alarming piece of the current equation. Uncertain energy dynamics of the late 20th Century and first years of the 21st Century have only strengthened the validity Mr. Feis' prediction. Oil remains the centerpiece of this nation's energy requirements.

President George W. Bush succinctly explains in *The National Security Strategy of the United States of America* (NSS) the important link between the economy and national security. The President declared that "A strong world economy enhances our national security." In this document, energy security is identified as part of a comprehensive strategy to strengthen our economy. Specifically, the NSS asserts,

We will strengthen our own energy security and the shared prosperity of the global economy by working with our allies, trading partners, and energy partners to expand the sources and types of global energy supplied, especially in the Western Hemisphere, Africa, Central Asia, and the Caspian region. We will also continue to work with our partners to develop cleaner and more energy efficient technologies.⁶

Unfortunately, the focus of this strategy limits our approach for sustaining energy security to finding new sources and technologies to satisfy this nation's appetite for energy. Even the Department of Energy's (DOE) 2003 Strategic Plan fails to address the importance of insuring unimpeded access to oil. As with the NSS, the DOE's 2003 Strategic Plan refers to energy security in the context of "reliable, affordable, and environmentally sound energy by proving for reliable delivery of energy." The only mention of potential disruptions is found in the context of the Strategic Petroleum Reserve and its capability of sustaining 4.4 million barrels per day (bpd) for 90 days. The language of this NSS is indeed vague when it comes to ensuring a continuous flow of oil to feed this nation's economic engine.

The reluctance of the American people and political leaders to drill in off-shore locations and in the Artic National Wildlife Refuge (ANWR) only increases our dependence upon foreign oil. A major portion of global oil is produced in the volatile region of the Middle East. Our national leaders should have tremendous concerns about the fact that 24 percent of the oil we

import originates from this region.⁹ By the year 2020, the projected amount of oil imported from the Gulf region is expected increase to 67 percent.¹⁰ All told, five of the top seven oil exporters to the United States are nations that suffer from an unstable government or are located in regions fraught with uncertainty. ¹¹ History offers many warning signs: the near disastrous results of the Suez Canal closure in the 1950s; the nationalization of Middle Eastern oil companies and the emergence of the Organization of Petroleum Exporting Countries (OPEC); the painful effects of the1973 oil embargo; the long gas lines and rationing of 1979 caused by oil shortages; the security issues that resulted in the reflagging of oil tankers in the 1980s; and Iraq's invasion of Kuwait. Yet, with all of these historic close calls and current complications in the War on Terrorism, the NSS does not address the potential threat of disrupted oil imports. We must take counsel from Feis' 1980 observation that "it is a time of decision, as the American people and their leaders engage in a great debate over national energy policy." ¹² Twenty-five years later, we still have not engaged in this critical debate.

The Threats

The threat to U.S. energy imports come from two sources—unstable regions with unfriendly governments and increased global competition. Two of the top three oil-producing countries that export to the United States face tremendous issues that could impact oil exports.¹³ The political environment for several oil-exporting countries could instantaneously shift in such a manner that could jeopardize the oil flow into this country. The second threat is global competition. Energy requirements for a growing world economy have generated a dramatic increase in the demand for oil. Globalization has increased and dispersed energy requirements. Demand for oil is rapidly increasing while production capacity has essentially remained at a constant state. The mismatch between production and demand places the United States in competition with more nations for a finite resource which is concentrated in a limited number of geographical locations.

Concerns over access to oil are not new. Harold Ickes, then Secretary of the Interior, made an alarming declaration in 1943 in an article entitled "We're Running Out of Oil!" He warned the nation's leadership that if a new large-scale war developed, this country and its allies would have to depend on another nation's oil. A year later, Everette Lee DeGoyler, a wealthy oil businessman, validated this pronouncement when he predicted "The center of gravity of world oil production is shifting from the Gulf-Caribbean area to the Middle East--to the Persian Gulf." These 1940's predictions soon proved to be true as Middle Eastern nations began to dominate oil production. Energy experts now predict that Middle Eastern dominance

will continue for a number of years. As reported in the *National Energy Policy*, the Middle East contains 67 percent of the proven oil reserves remaining on the planet. ¹⁶ As the British pulled out of the region in the 1960s, the United States recognized the importance of this area and moved to increase its presence. Arms trade with Saudi Arabia, the defense of Kuwait, and the permanent basing of American forces in the region demonstrate the strategic importance of the region. What makes this a challenging situation for the United States is the region's history of instability.

The U.S. relationship with Middle Eastern nations has been a delicate diplomatic balancing act. Alliances have been built around anti-communist oil-producing nations even when they required supporting an unpopular dictator. This nation's relationship with Israel has complicated the matter even further. Arab hatred for the Jewish nation has led to four wars, repeatedly placing the United States in a very precarious situation with Arab oil-producing nations. Arab OPEC leaders eventually introduced the term "oil weapon" as a means to disrupt the U.S.-Israeli relationship.¹⁷ The 1973 Yom Kippur War and U.S. support to Israel led to an oil embargo which generated large price increases, gasoline shortages, long lines at filling stations—setting off panic within the United States.¹⁸ Through the vehicle of OPEC, Arab nations demonstrated their power to use oil as a means to achieve diplomatic goals—to have Europe and Japan pressure the United States into forcing Israel to move back to its pre-1967 borders.¹⁹ After months of negotiations, the embargo ended--but not before harming the U. S. economy. In 1979, the Unites States suffered through shortages and price increases resulting from internal issues in Iran. The availability of oil imports was again jeopardized in the 1980s when the United States reflagged Kuwaiti oil tankers that carried oil destined for this country. Iraq's 1990 invasion of Kuwait and its subsequent threatening gestures towards Saudi Arabia forced President George H. W. Bush to deploy soldiers to the region to protect allies--but more importantly, to guarantee our access to oil. Subsequently, the United States began to base American forces permanently on the Arabian Peninsula.

The Middle East is not the only region presenting challenges to the U.S. In another oil-producing region, the Venezuelan government, led by Hugo Chavez, has become increasingly hostile towards the United States. This is particularly troubling since Venezuela is the third largest oil exporter to this country. Internal political issues--fueled by alleged election fraud, a declining economy, acquisitions of weapons from Russia, development of a closer friendship with China, and increased anti-American rhetoric--have contributed to an uneasy relationship. The Venezuelan leader's fear of a potential U.S. invasion has led that country to conduct warplanning and military exercises to counter such a move. Chavez recently agreed to give Indian

oil companies claims to 49 percent in a new Venezuela oil field, thereby demonstrating his willingness to seek other markets.²⁰ The U.S.-Venezuelan relationship could deteriorate to the point that Chavez may decide to decrease oil exports to the United States while shifting exports to Asia. Increasing demands for oil from Asia give Venezuela market flexibility which could provide leverage against U.S. policy. Increasing global demands give Chavez and other oil producers more trade flexibility to shift exports. The situation in Venezuela serves as a good example of a strained relationship between the Unites States and an oil-producing nation. The geo-political environment and U.S. foreign policy has created a volatile situation that could jeopardize trade.

The second threat to U.S. oil imports is global competition. Fluctuating 2005 prices have taught America a tough lesson—we are not alone when it comes to energy requirements. The growth of the global economy has dramatically increased energy consumption in countries that have traditionally used lesser amounts of oil. Globalization and the race to gain a competitive edge in the market have triggered tremendous industrial growth across the globe. With the human race growing at a rate of 80 million people per year, one estimate puts global population close to 8 billion people by the year 2020.²¹ These individuals will need energy to heat homes, to generate electricity, and to power automobiles. As Thomas P. M. Burnett explains in *The Pentagon's New Map*, "Americans tend to forget that cheap oil doesn't work just for us but for people all over the planet."²² The global demand for energy is now clashing with America's constantly increasing appetite for oil.

China and India are experiencing a substantial increase in their requirements for energy and now compete with the United States for oil. Proof of this increase can be seen in the number of automobiles that now occupy the streets of China. The image of Chinese riding their bikes is quickly being replaced by one of them driving new cars. In 2002, Chinese consumers purchased two million cars--a 70 percent increase from the previous year. By the year 2010, China expects to add 10 million new cars annually to their roads. Similarly, India's industrial capacity is quickly increasing to keep pace with its growing population and to garner its fair share of the global market. India ranks sixth in the world in oil demand; it imports 70 percent of its petroleum. Today, Asia imports 18 million barrels of oil per day, and energy experts predict a 90 percent increase to 35 million bpd by 2025. The United States must find ways to mitigate the effects of the new global demands for oil.

One component of the global competition is the issue of access to oil reserves. At a recent oil industry conference held in London, participants focused on one question: "Can more oil be found and produced fast enough to hold off a global energy crunch?"²⁷ The answers to

that question vary and arouse controversy. The American Petroleum Institute estimates that 1.1 trillion barrels of oil remain; accordingly, this supply would last only 43 years.²⁸ Estimates of peak world production vary. The U.S. Geological Survey predicts the world's production rate will peak in 2040, while others see global capacity peaking in 2016.²⁹ Finding new fields or even accessing known reserves presents technological and political challenges. Tapping into reserves located under oceans or in rugged regions of western Asia have proven difficult and expensive. Remaining reserves are spread throughout the globe. The ocean floor under the Gulf of Mexico potentially offers 25 billion barrels, while the estimates for the Gulf of Guinea go as high as 50 billion barrels.³⁰ One of the most promising areas is the Caspian Sea region with an estimated reserve of 17 to 35 billion barrels.³¹ But this region is troubled by political issues which could hinder movement of the oil to consumers. The challenges for the remaining oil reserves are quite simple: none exists within the United States; harvesting known reserves will be difficult; and a majority of them are concentrated in volatile areas. The consequences of a depleting supply are dire. Paul Roberts suggests "oil depletion is arguably the most serious crisis to ever to face industrial society."³²

Energy Demands and the Impact on the United States Economy

To illustrate just how profoundly oil affects American lives, we must go beyond charts and graphs depicting energy demands. *National Geographic's* June 2004 edition featured an article which clearly demonstrates just how dependent Americans are on oil. ³³ A family of seven served as an example of just how intertwined oil is in the lives of Americans. The article poignantly reveals that almost every family possession consists of oil-based polymers-everything from shoes to clothes to toys to automobiles. One analyst asserts that "Simply put, everyone in this country benefits from cheap petroleum because it flows throughout our economy and not just in our gas guzzling cars." Even though oil contributes to most of our possessions, the vast majority goes towards transportation. Because of this, our demands long ago exceeded the nation's capacity to meet supply requirements with domestic oil.

The tipping point for the Unites States came in 1948, when imports exceeded exports for the first time. This country could no longer produce enough domestic oil to meet the nation's demand. A second blow to U.S. domestic oil production would develop three decades later. In 1956, M. King Hubbert, a Texas geophysicist working for Shell, predicted the United States would reach its peak in oil production by 1972. In fact, domestic production topped out in 1970. This was soon followed by the exploitation of Alaska's prized oil field at Prudhoe Bay. This was soon followed by the exploitation of Alaska's prized oil field at Prudhoe Bay.

oil increased, so did this nation's vulnerability to disruption of oil supplies. The United States requires approximately 20 million bpd to meet consumer needs, which equates to 40 percent of this nation's total energy requirements.³⁸ Industry consumes 25 percent, while transportation uses approximately 66 percent of the oil.³⁹ A demand for bigger homes, larger pickup trucks, and the dramatic increase in sports utility vehicles has generated a thirst for even more petroleum. Despite increased efficiency in home heating and less oil-intensive industrial processes, the demand for oil continues to escalate.

The cost of heating oil and gasoline climbed significantly within the last year, impacting the consumer far beyond the gas pump. Vice President Richard Cheney acknowledged this in the National Energy Policy: "Current high prices and supply shortages are hurting U.S. consumers and businesses, as well as their prospects for continued economic growth."40 Unlike the cost of the War on Terrorism, energy costs directly impact each individual on a daily basis. The rise in energy prices has negatively affected the nation's economy causing the stock market to react nervously to each increase in the price of oil. However, second- and third-order effects often go unnoticed as oil prices increase. Each price increase for gas and heating oil leaves the consumer with less purchasing power. As noted by Alan Greenspan, "energy prices will undoubtedly be a drag from now on."41 Industrial production costs, material prices, and expenses associated with transportation are all eventually passed on to consumers. A 12 percent increase in energy costs during the month of September was most evident in the price of oil and the related cost of gasoline.⁴² The 1973 embargo triggered record price increases that had a devastating effect on the U.S. economy and led to a recession. This demonstrates the serious consequences an interruption of oil can have on the U.S. economy. If the fallout from the 1973 embargo was not enough to convince us of the potentially devastating outcome, which it didn't, a quick glance at the 2000 study by the International Monetary Fund(IMF) should give national leaders pause.43 The IMF developed a scenario in which gasoline prices surged to five dollars a gallon. The gross domestic product of the United States and a majority of European countries declined to .3 percent annually. World financial markets dropped, and nations that imported oil lost significant wealth. During, the 1973 embargo, the Standard & Poor's Index 500 indicated that major U.S. corporations lost 47.7 percent of their value.44 Fluctuating oil prices or the lack of oil influences all businesses, especially those that rely heavily on oil.

The transportation sector bears a tremendous burden when prices rise or fuel shortages occur. The economic damage from an oil crisis would be staggering. U.S. transportation system, the largest in the world, directly affects 7 million businesses and employs one in seven

Americans.⁴⁵ Most U.S. businesses rely on a transportation system that delivers products fast. The growth of internet shopping, consumers' desires to have fresh foods throughout the year, and reductions of large inventories sitting in warehouses have contributed to the rapid expansion of commercial transportation. This requirement has generated a 97 percent increase in the use of air fright since 1993.⁴⁶ Trucks moved approximately 63.7 percent of all U.S. commercial freight in 2002. That equates to 6.7 trillion dollars in freight.⁴⁷ Since the transportation sector accounts for one in every ten dollars in the nation's Gross Domestic Product, it easy to see the crippling effect a dramatic drop in oil imports could have on the economy.⁴⁸ Even a short interruption could send consumer prices skyward and set off panic. The psychological impact combined with real economic difficulties would create an unstable domestic environment, thereby impacting internal security as well as our ability to secure global interests.

New National Security Strategy

U.S. reliance upon oil clearly places this nation in a vulnerable position. Previous incidents have shown the effects of even the slightest disruptions. If such disruptions occurred today, it is very unlikely that additional markets could replace our loss of access to a large volume of oil. Recently, Russia withheld natural gas supplies from Ukraine, demonstrating "when it comes to hydrocarbons, geopolitics and geology are inextricable." Mounting issues with Iran's nuclear program and the threat of increasing oil prices is further evidence of the troubling relationship of politics and oil. The challenge of the modern geo-political environment offers numerous realistic scenarios in which a producing nation or a group of nations may decide to cease exporting oil to the United States. Embargos would hurt the profit margins of oil-producing nations; however, as demand continues to increase while supply levels remain relatively constant, the economic pain for OPEC nations may not be as great as it was in 1973-74. A growing energy appetite in Asia will allow oil producers to shift their markets, which will lessen their financial risks in finding other markets. On the other hand, if major oil-producing nations were under the control of fanatical elements who are more concerned with political and religious objectives, profits would be less of an issue. Recently, Senate Majority Leader, Senator Bill Frist, referred to the fact that this nation imports 60 percent of our oil, calling this dependence "dangerous" especially in view of the fact that several of the oil-producing nations sponsor terrorism.⁵⁰ Since some national leaders now acknowledging the problem, then it begs the question of why we are not posturing this nation to deal with a potential crisis. Our leaders must acknowledge the willingness and capability of an adversary to use the "oil weapon."

The 2002 NSS fails to adequately address this kind of threat. The President believes we can achieve energy security through the shared prosperity gained by working with our friends and trading partners and discovering new technologies. However, these goals are oriented towards the future offering no specific timeframe for implementation and fail to address the present situation. The NSS repeatedly asserts the importance of economic prosperity in relationship to the security of this nation. The amount of foreign aid and diplomatic effort this government devotes to guaranteeing an uninterrupted flow of oil imports demonstrates the importance this commodity has to the national economy and security. Former commander of Central Command (CENTCOM), General Anthony Zinni, responding to congressional questioning about the number of military exercises in the CENTCOM region and the relevance of the exercises to national interest and national security, replied "My region, the Middle East, is obviously valuable to us as a source of oil and natural gas, the need to keep the region stable in there ...is critical to our own economy. Thus the general clearly acknowledged the critical strategic nature of oil. The NSS, the overarching document that directs use of the elements of national power, fails to prepare the country for this catastrophic situation.

The President must address the issue of energy security by educating the American public about the importance oil with regard to the economy and explaining that we must prepare to use military force to guarantee access to oil. Oil is this nation's economic lifeblood. The public's understanding must transcend the anti-capitalistic chants of "no blood for oil" and public distrust of oil corporations. Typically, Americans will only support drastic changes, especially those that affect their daily lives and their budgets, if faced with extreme circumstances. The President would face a daunting task of convincing the public of the need to take a preemptive position, even if it is a temporary measure, until the nation achieves energy independence. Unfortunately, this would be an unpopular policy position. However, the likelihood of Americans supporting policies that push alternative energy would be just as unpopular. New tensions in Iran and Venezuela and the threat of 100-dollar barrel of oil are generating more interest in energy security. As unpopular or aggressive as this policy may seem, it is a necessary stopgap measure until this nation is free of its dependence on foreign oil.

A preemptive position is not without precedent. In August 1975, the Congressional Research Service delivered a feasibility study to the Special Committee on Investigations of the House Committee on International Relations that considered using military force to seize oil fields.⁵³ The study identified the need to secure oil installations, restore damaged facilities, operate facilities, and protect the overseas passage of oil. Estimates of the duration of such an operation ranged from weeks to years. In response to the Iranian Revolution of 1978, the

Soviet Union's invasion of Afghanistan, and Wahhabi extremists' attempt to overthrow the Saudi leadership, President Jimmy Carter announced a new policy to maintain energy security. ⁵⁴ This policy, known as the Carter Doctrine, made clear to potential adversaries and to the American people that any attempt to deny the U.S. access to petroleum would result in the use of military force. The doctrine was unequivocal: "Any move by a hostile power to acquire control over the Gulf region would be regarded 'as an assault on the vital interest of the Unites States of America' which would be opposed 'by any means including military force." Russia no longer threatens the region, but other groups such as extremists, revolutionaries, and governments unfriendly to the United States pose significant threats to the flow of oil in the Middle East. Regional instability, diminishing capacity, increased competition, and the nation's foreign policy are contributing to a volatile situation which makes the Carter Doctrine relevant in today's environment.

A decision to use military force to secure access to foreign oil must be considered only after all other efforts have failed. Indeed the soft elements of national power have largely succeeded to assuring the continuous flow of foreign oil that this country has enjoyed since the 1973 embargo. Diplomatic, informational, and economic incentives have served as effective means for achieving energy security. Diplomatic efforts ended the 1973 oil embargo, reversed various OPEC production cutbacks, and provided access to new markets. In the past, economic and military aid to oil-producing nations provided a framework for cooperation and acquiring new friendships. However, globalization, declining resources, and the War on Terrorism have recently complicated diplomatic efforts and strained relationships. So we cannot ignore a situation in which events could spiral out of control to the point that oil would be used as a diplomatic weapon. If such an event evolved, use of U.S. military force to secure oil fields, pumping stations, tank farms, terminals, and critical ocean choke points must be considered as a suitable and reasonable response to protect our national interest. We must assume that it would take a sizable joint force combined with a large number of contractors to insure production rates keep pace with demands. The cost in manpower and treasury would be significant, especially if the response involves several oil-producing nations while the nation simultaneously fights the War on Terrorism.

The foregoing analysis demonstrates that our national strategy must identify the nation's access to adequate supplies of oil as a vital national interest. The dire economic, social, and political consequences associated with a severe reduction in imported oil justifies the use of military action, regardless of world opinion. We must act unilaterally if the circumstances warrant such action. A precipitive use of the military could easily trigger an escalation in

hostilities, generate a tremendous amount of anti-American sentiment, lead to United Nations' sanctions, and fracture friendships and alliances. But compared to the economic effects of an oil shortage, such risks are acceptable. President Carter summed up the dark reality of the loss of oil: "We live in fear of embargos...our factories will not be able to keep our people on the job with reduced supplies of fuel...Inflation will soar, production will go down, people will lose their jobs...If we fail to act soon, we will face economic, social, and political crisis that will threaten our free institutions." 56

New policy must anticipate the troubles that would follow an embargo; however, such policy will be widely criticized, even if it is obvious that the current situation requires a stronger policy. Richard Kruger advised that "Current policy must also shape the future, to propel it against opposing forces—toward destinations conducive to U.S. national interest and moral values."67 To shape the future, development of alternative energy sources is essential to reducing the risks of a preemption doctrine. Without doubt, this nation should get on the glide path to energy independence. America has faced energy issues before, forcing our leaders to examine various methods to make the nation less dependent on foreign oil. However, as each crisis passed or as production rates increased to meet increased demands, the national will to conserve, to develop new technologies, and to become energy-independent quickly evaporated. Our use of diplomacy and reliance of military force has assured the continuous access to oil, but at a tremendous cost to the American taxpayer. Thirty-two years after the first energy crisis, the United States is no closer to being independent of foreign oil than it was in 1973. As former Central Intelligence Agency (CIA) director Robert M. Gates warned, "The American people are going to pay a terrible price for not having had an energy policy."58 Our current policy has failed to move this country toward energy independence. Special interest groups, both pro-oil and pro-environment, compete for political advantages that often generate only symbolic policy changes. A radical policy change would in all likelihood be unpopular. Further, given the current political environment, it is very unlikely that such decisions are forthcoming. The recent debate over social security reform illustrates our leaders lack of political courage and the steadfast stubbornness of the American people to deal with tough and unpopular issues.

But our energy policy must change. As noted in *The Economist*, the solution will come about through planning and "a certain amount of grim realism, but not for outright panic." This change should mandate a much-needed approach towards achieving energy independence ultimately making the United States less vulnerable to interstate competition and potential conflicts that could threaten the flow oil. Past policy and legislative initiatives often focused on quotas to support a delicate balance of keeping prices down, meeting domestic needs,

supporting domestic production, and not alienating foreign producers. Yet, not until the 1973 Arab oil embargo did this nation's leadership seek to reduce our dependence on foreign oil. President Richard Nixon made the first attempt by developing a comprehensive energy policy incorporating new ideas such as changing utilities from oil to coal, stressing conservation, and establishing the Energy Research and Development Administration, all of which led to a call for a "Manhattan Project" to lessen the nation's dependence on foreign oil. 60 In 1977, President Jimmy Carter's stern warning, "The energy crisis has not yet overwhelmed us, but it will if we do not act quickly," did nothing to lessen our dependence on foreign oil. 61 As with previous attempts, acknowledgement of the need to develop alternative energy sources, to conserve, and, most importantly, to reduce foreign oil imports soon faded as prices stabilized and supplies increased. Through the next three administrations, very little was accomplished to decrease this nation's dependence on foreign oil or to capitalize on technology. The Bush administration's long-range plan in The Department of Energy's Strategic Plan calls for "a diverse supply of reliable, affordable, and environmentally sound energy by providing for reliable delivery of energy."62 In this plan, the administration established the goal of oil independence but did not develop a timeframe to achieve it and has not moved forward with legislation to codify these objectives. Thirty-two years have passed since the first embargo, yet the government has demonstrated a lack of genuine planning that would place this nation on the path of being free of foreign oil. Unfortunately, this has left the country more dependent, more vulnerable, and less prepared for the future.

A plan that achieves true energy independence must specify immediate action along with long-range objectives. It must assure sustained economic growth and protect Americans from the perils of an energy crisis. President Bush's announced during his 2006 State of the Union address that "America is addicted to oil" and that consumption of Middle Eastern oil would be cut by seventy-five percent by 2025. This was a tremendous acknowledgement of this nation's energy predicament. Unfortunately, during the nineteen years estimated to achieve this goal, the nation will remain at risk. A recent RAND report presents a better approach by suggesting near-, mid-, and long-term goals. Realizing it will take time to convert of our economy and energy consumption habits, the RAND report stresses the need for immediate action as we acquire alternative sources of energy. Near-term RAND actions call for conservation and initiatives such as increasing efficiency to reduce energy intensity. Energy experts believe it will require a decade before conservation and new technologies close the gap between demand and supply which should give us a sense of urgency to take immediate action. Impressively, some automobile manufactures are already providing consumers with electrical-gasoline

powered cars. Mid-range goals of shifting to oil shale, oil sand, and increasing the number of hybrid cars will provide significant relief from dependence on foreign oil. The ultimate long term goal of eliminating gas fueled cars and replacing them with hydrogen powered automobiles is still years away. With 95 percent of this nation's transportation currently dependent upon gas, a substantial amount of work is needed in this area where change can have the greatest impact. Other alternatives such as clean coal electrical generation plants and nuclear power facilities will continue to reduce the need for oil; however, construction time, cost, and legal battles make these projects risky investments. Leaps in technology affecting all facets of life make it increasingly possible to achieve cost-effective methods to eliminate the need for oil. The economic benefits of reducing foreign imports would lessen the trade deficit and reduce the amount of energy needed to grow the gross national product. This problem can be solved through a combination of near-term actions, mid-range objectives, and long-range planning. Until the government codifies these objectives, change will evolve only out of necessity. Otherwise, the United States will remain shackled to oil, leaving us in a vulnerable position that may lead us into a predicament requiring the use of military force to guarantee the flow of oil.

Conclusion

America's energy demands have become a primary national security issue. Our economy and way of life depend on various sources of energy, the most important of which is oil. As noted by Boston University Professor Robert Kaufmann, "Overall economic health is directly tied to energy. Almost every U.S. recession has been tied to the cost of oil."68 The fact that a large portion of imported oil originates from volatile regions of the world should arouse tremendous concern in the national leadership. Disruption of the nation's access to oil would have a devastating effect on the economy and the security of the United States. As clearly articulated in President Bush's 2002 National Security Strategy, a healthy economy is a critical component to our nation's security. Accordingly, the nation's security strategy must acknowledge the importance of oil to the economy and must specify a policy to guarantee access. Without doubt, we should rely on non-military elements of national power to remedy a potential situation; however, the President, Congress, and military leaders must prepare for a scenario in which military forces deploy to secure oil production facilities. More importantly, the American people, our allies, and potential adversaries need to understand this as well. The most effective vehicle for such a pronouncement is the president's National Security Strategy. As currently written, the strategy fails to send an appropriate message.

The reality of this nation's energy situation must elevate concerns within the American public to demand a new direction. As suggested by John M. Amiden, "The current world energy situation poses a national threat unparalleled in 225 years."69 Energy is an essential component of the daily life of this nation. The realistic solution is to eliminate our reliance on oil to avoid further international incidents, reduce environmental pollutions, and lessen the cost of energy for our citizens. The President should demand an immediate reduction in all oil consumption and offer a date to render the nation completely free of foreign oil. A leader with strategic vision and strong leadership must initiate programs for increased conservation and efficiency to curb our wasteful habits while simultaneously developing a comprehensive long-range strategy that capitalizes on technology to achieve energy independence. A national effort on the scale of the Manhattan Project is needed to shift the nation away from oil placing America on a more secure path. Because lessons of the past have not been learned, we are left in a dangerous position that may require us to act preemptively to guarantee access to sources of energy. Our leaders and citizens must fully understand the link between oil, the economy, and national security. They must realize the costs in treasury and blood we are paying for oil. Then they will demand a new strategic direction toward energy independence. Without a change in policy, laws, habits, and attitudes, we will remain chained to oil.

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